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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,170	07/27/2000	Chung Tong	PT03452U	2322

7590 10/21/2003

Motorola Inc  
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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/627,170

Applicant(s)

TONG ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (U.S. Patent 6,002,937) in view of Raith et al. (U.S. Patent 5,603,081).

3. In regard to claim 1, Young et al. disclose a wireless device for transmitting packets of a message during an assigned time slot of cycles of a time-division protocol (col. 3, lines 55 and 62), comprising: a housing, the housing having a first position and a second position (figure 1, elements 180, 128, 107; col. 2, lines 26-33 where "open" and "closed" cover element implies a first position and a second position). Young et al. lack a transmitter within the housing, the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the protocol when the housing is in the first position and transmitting packets of the message in the assigned time slot of every nth cycle of the protocol when the housing is in the second position. However, Raith et al. disclose a transmitter within the housing, the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the protocol when the housing is in the first position and transmitting packets of the message in the assigned time slot of every nth cycle of the protocol when the housing is in the second position (figure 3

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where it shows the full-rate transmitting every 3 time slots (or a 20 ms frame) and transmitting in adjacent cycles; and the half-rate transmitting every 6 slots or every  $n=2$  cycles). It would have been obvious to one with ordinary skill in the art at the time of invention to include the alternate transmitting cycle with the housing. The motivation being to save bandwidth of the system and battery life of the mobile station.

4. In regard to claim 2, Young et al. disclose a device for transmitting packets of a message during an assigned time slot of cycles of a time-division protocol (col. 3, lines 55 and 62), comprising: a housing, the housing having at least two portions, the at least two portions being movable relative to each other (figure 1, elements 180, 128, 107; col. 2, lines 26-33 where "open" and "closed" cover element implies a first position and a second position). Young et al. lack a transmitter within the housing, the device capable of selecting a transmit duty cycle of the transmitter, the transmit duty cycle being dependent upon a position, relative to each other, of the at least two portions of the housing. However, Raith et al. disclose a transmitter within the housing, the device capable of selecting a transmit duty cycle of the transmitter, the transmit duty cycle being dependent upon a position, relative to each other, of the at least two portions of the housing (figure 3 where it shows the full-rate transmitting every 3 time slots (or a 20 ms frame) and transmitting in response to one position of a portion of the housing; and the half-rate transmitting every 6 slots and transmitting in response to the other position of a portion of the housing). It would have been obvious to one with ordinary skill in the art at the time of invention to include the alternate duty cycles in response to a position

of a portion of the housing with the movable housing. The motivation being to save bandwidth of the system and battery life of the mobile station.

5. Claim 3 is rejected for the same reasons as claim 2 even though claim 2 lacks the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the time-division protocol when the at least two portions of housing are in the first position and the transmitter transmits packets of the message in the assigned time slot of every nth cycle of the time-division protocol when the at least two portions of housing are in the second position. However, Raith et al. further disclose the transmitter transmitting packets of the message in the assigned time slot of adjacent cycles of the time-division protocol when the at least two portions of housing are in the first position and the transmitter transmits packets of the message in the assigned time slot of every nth cycle of the time-division protocol when the at least two portions of housing are in the second position (figure 3 where it shows the full-rate transmitting every 3 time slots (or a 20 ms frame) and transmitting in adjacent cycles; and the half-rate transmitting every 6 slots or every  $n=2$  cycles).

6. Claims 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. as applied to claims 1 and 2 above, and further in view of Henry, Jr. et al. (U.S. Patent 6,560,453 B1).

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7. In regard to claim 4, Young et al. disclose the device of claim 3. Young et al. lack a controller programmable to select a value of n. However, Henry, Jr. et al. disclose a controller programmable to select a value of n (col. 1, lines 60-65 and col. 2, line 14 where the controller is implied to be in the mobile terminal). It would have been obvious to one with ordinary skill in the art at the time of invention to include the programmable controller with the device of claim 3. The motivation being to have a way of controlling the selection of the duty cycles.

8. Claim 5 is rejected for the same reasons as claim 4 even though claim 4 lacks a keyboard, and in which the controller is programmable through use of the keyboard. However, Henry, Jr. et al. further disclose a keyboard, and in which the controller is programmable through use of the keyboard (figure 2, elements 42, 54 and figure 3, elements 54, 74 where the keyboard is connected to the processor which is connected to memory which contains the SCI manager where SCI is defined as in claim 4).

9. Claim 6 is rejected for the same reasons as claim 4 even though claim 4 lacks a sensor coupled to the housing, and to the controller and in which the sensor detects the position of the housing. However, Young et al. further disclose a sensor coupled to the housing, and to the controller and in which the sensor detects the position of the housing (col. 2, lines 25-32 where "off-hook" and "on-hook" imply that there is a sensor connected to a controller in the device detecting each position).

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10. Claim 7 is rejected for the same reasons as claim 6 even though claim 6 explicitly lacks the controller receiving a signal from the sensor regarding the position of the housing. It is obvious however, that the controller must receive a signal from the sensor if it is coupled to it. If the controller did not receive a signal from the sensor there would be no reason to couple the sensor to the controller.

11. In regard to claim 8, Young et al. disclose in a device having a transmitter and a housing, the housing comprised of two or more portions, at least one portion of the two or more portions movable into a plurality of positions (figure 1, elements 180, 128, 107; col. 2, lines 26-33 where "open" and "closed" cover element implies a first position and a second position). Young et al. lack a method of controlling a transmit duty cycle of the transmitter by a position of the at least one portion of the two or more portions of the housing, comprising the steps of: storing in the device stored transmit duty cycles of the transmitter, one transmit duty cycle associated with one position of the plurality of positions of the at least one portion of the two or more portions of the housing, another transmit duty cycle associated with another position of the plurality of positions of the at least one portion of the two or more portions of the housing; determining a current position of the plurality of positions of the at least one portion of the two or more portions of the housing; and in response to the current position, setting a current transmit duty cycle of the transmitter to one of the stored transmit duty cycles. However, Raith et al. and Henry, Jr. et al. disclose a method of controlling a transmit duty cycle of the transmitter by a position of the at least one portion of the two or more portions of the

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housing, comprising the steps of: storing in the device stored transmit duty cycles of the transmitter (Henry, Jr. et al. figure 2, element 54 where the SCI (duty cycle) as defined in claim 4 is stored in element 54), one transmit duty cycle associated with one position of the plurality of positions of the at least one portion of the two or more portions of the housing, another transmit duty cycle associated with another position of the plurality of positions of the at least one portion of the two or more portions of the housing (Raith et al. figure 3 where it shows the full-rate transmitting every 3 time slots (or a 20 ms frame) and transmitting in response to one position of a portion of the housing; and the half-rate transmitting every 6 slots and transmitting in response to the other position of a portion of the housing); determining a current position of the plurality of positions of the at least one portion of the two or more portions of the housing; and in response to the current position setting a current transmit duty cycle of the transmitter to one of the stored transmit duty cycles (if the device responds to the position of a portion of the housing by selecting an appropriate duty cycle then the current position of the movable portion is known and a duty cycle is already chosen as in claim 2). It would have been obvious to one with ordinary skill in the art at the time of invention to include the device having a movable housing with the storing of duty cycles and deciding of duty cycles. The motivation being to save bandwidth and save battery energy.

12. Claim 9 is rejected for the same reasons as claim 8, even though claim 8 lacks the step of transmitting at the current transmit duty cycle of the transmitter (it is implied by the choosing of the duty cycle that the mobile station is going to transmit at that duty



cycle, if the mobile station were to not transmit at that duty cycle there would be no point in changing duty cycles).

13. In regard to claim 10, Young et al. disclose in a device having a transmitter and a housing, the housing comprised of two or more portions, the portions capable of being moved into more than one position relative to each other (figure 1, elements 180, 128, 107; col. 2, lines 26-33 where "open" and "closed" cover element implies a first position and a second position). Young et al. lack storing in the device stored transmit duty cycles of the transmitter, one stored transmit duty cycle associated with one position, another stored transmit duty cycle associated with another position; determining a current position of the portions; in response to the current position, setting the current transmit duty cycle of the transmitter to one of the stored transmit duty cycles; and transmitting at the current transmit duty cycle of the transmitter. However, Raith et al. and Henry, Jr. et al. disclose storing in the device stored transmit duty cycles of the transmitter (Henry, Jr. et al. figure 2, element 54 where the SCI (duty cycle) as defined in claim 4 is stored in element 54), one stored transmit duty cycle associated with one position, another stored transmit duty cycle associated with another position (Raith et al. figure 3 where it shows the full-rate transmitting every 3 time slots (or a 20 ms frame) and transmitting in response to one position of a portion of the housing; and the half-rate transmitting every 6 slots and transmitting in response to the other position of a portion of the housing); determining a current position of the portions; in response to the current position, setting the current transmit duty cycle of the transmitter to one of the

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stored transmit duty cycles (if the device responds to the position of a portion of the housing by selecting an appropriate duty cycle then the current position of the movable portion is known and a duty cycle is already chosen as in claim 2); and transmitting at the current transmit duty cycle of the transmitter (it is implied by the choosing of the duty cycle that the mobile station is going to transmit at that duty cycle, if the mobile station were to not transmit at that duty cycle there would be no point in changing duty cycles). It would have been obvious to one with ordinary skill in the art at the time of invention to include the device having a movable housing with the storing of duty cycles and deciding of duty cycles. The motivation being to save bandwidth and save battery energy.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

16. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**

Joshua Kading  
Examiner  
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JK

October 7, 2003